South Carolina

Enterprise Architecture

Microcomputer Life Cycle Services

Best Practice

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1.0 Introduction

The State Budget and Control Board is authorized to undertake the development of enterprise architecture policies and standards as set forth in **Section 11-35-1580** of the *South Carolina Consolidated Procurement Code*. This Section states, in part, that the State Budget and Control Board shall be responsible for:

- Assessing the need for and use of information technology;
- Administering all procurement and contracting activities undertaken for governmental bodies involving information technology in accordance with this chapter;
- c. Providing for the disposal of all information technology property surplus to the needs of a using agency;
- d. Evaluating the use and management of information technology;
- e. Operating a comprehensive inventory and accounting reporting system for information technology;
- f. Developing policies and standards for the management of information technology in state government;
- g. Initiating a state plan for the management and use of information technology;
- h. Providing management and technical assistance to state agencies in using information technology; and
- i. Establishing a referral service for state agencies seeking technical assistance or information technology services.

The State Budget and Control Board has delegated this authority to the Division of the State CIO. Based upon this authority, the Division of the State CIO has established the SC Enterprise Architecture to conduct operations and take actions to fulfill this mandate.

1.2 Purpose

To lower the overall total cost of ownership of microcomputers by establishing an effective means of managing the microcomputer life cycle.

1.3 Scope

This applies to local, county and state government entities that are bound by the SC Consolidated Procurement Code.

1.4 Background

Failure to take a holistic view of the microcomputer life cycle can lead to inefficiencies, duplication, omissions and ultimately, unnecessary cost, essentially raising the total cost of ownership (TCO). Microcomputer Life Cycle Services refer to the procurement, deployment, management/operations and retirement/transition of the desktop. The life cycle services start just before the PC acquisition phase and continue through disposal and transition to the replacement platform. These services can be supplied by microcomputer vendors as part of the original acquisition deal.

Microcomputer Life Cycle Stages and Associated Services



Procurement

- · Requirements planning
- Vendor selection
- RFI/RFP/RFQ process
- · Contract negotiations
- · Financing options (for example, leasing)



Retirement/Transition

- Asset removal
- · Hard drive sanitization
- · License reclamation
- Indemnification
- · Replacement system evaluation

Microcomputer Life Cycle Services

Deployment

- Hardware configuration
- · System image development
- Migration
- · Delivery to user desks



Management/Operations

- Help desk/end-user support
- Training (users and IT staff)
- Asset management
- · Configuration management
- Vendor management
- Break/fix
- Software updates
- · Patch management
- Security
- Backup



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Source: Gartner Dataquest

1.5 Definitions

Life Cycle - The complete span of an enterprise's use of an IT asset, from procurement through management and disposal.

Total Cost of Ownership - A comprehensive assessment of information technology (IT) or other costs across enterprise boundaries over time. For IT, TCO includes hardware and software acquisition, management and support, communications, end-user expenses, and the opportunity cost of downtime, training and other productivity losses.

2.0 Recommendation

2.1 General

Leading industry best practices and research indicates that microcomputers have become a commodity item with an average shelf-life of 4 to 5 years. Because of this commoditization, the need for highly customized and individualized equipment no longer exists. Instead, vendor services providing for the management of the full microcomputer life cycle (procurement, deployment, management, and retirement) have become the value-added differentiator. To leverage this new paradigm, the Presentation Services Domain subcommittee of the SC Enterprise Architecture Oversight Committee has developed a comprehensive enterprise solution for the acquisition and life cycle management of microcomputers.

Through a partnership with the Division of the State CIO and a contracted vendor, government entities can acquire microcomputers that offer the full microcomputer life cycle. The life cycle would be a 'cradle to grave' approach that will commoditize the microcomputer just like any other general office automation equipment.

2.2 Procurement

IT organizations should develop microcomputer purchase or lease contracts that provide the flexibility to adapt to business changes. Contracts should go beyond the standard terms and conditions, and include items that address performance and allow for business change. An annual review provision should be built into the contract to determine whether deliverables and supplier performance is met.

2.3 Deployment

IT organizations have realized that major efficiencies can be gained by tying together deployment with traditional desktop management services. Another aspect to consider during deployment is ensuring that the right user has the right software on their PC. Service providers driven by customer demands now offer a broad suite of services to include hardware configuration, system image development, migration and delivery to user desks.

2.4 Management/Operations

Microcomputer life cycle management includes a multitude of services. Managing the users' configuration and their support is driving customers to consider configuration management vendors that incorporate help components.

2.5 Retirement/Transition

Lack of clear policies/regulations or poorly designed processes can expose an organization to various risks. The organization disposing of the microcomputer bears the burden of proof for showing that appropriate procedures were followed in the event of litigation or investigation. Best practice microcomputer disposal processes provide an audit trail documenting the inventory of disposed device. To that end the State has developed legislation outlining a comprehensive disposal strategy. Reference the SC Enterprise Architecture Hardware Sanitization Policy found at: cio.sc.gov.

The Division of the State CIO has researched extensively the vendors that provide the complete life cycle management service. Please contact us at 896-0300 or cio.sc.gov for additional information.